Using Community-Based Social Marketing to Promote Oil Recycling Among DIYers

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April 28, 2005

With special thanks to Amy Garden, Melinda Barrett, and Jim Shields for their collaboration. Funded by the California Integrated Waste Management Board.

OUTLINE

- 1. Background on oil disposal among DIYers
- 2. Psychology of behavior change
- 3. Community-Based Social Marketing
- 4. Pilot interventions
 - Los Angeles (Melinda Barrett)
 - Madera (Jim Shields)
 - Napa (Amy Garden)
- 5. Conclusions

Collection of Used Motor Oil

- 35 million Californians (2003 figures)
 - 19% of whom are DIYers
 - Generate 55.7 million gallons of used oil each year
 - 21.8 million collected: certified centers (19.9), curbside (.9), form 303 (1)
- Where does the oil go?
 - Spilled, burn-off, improper disposal, "stored"
- Improper disposal survey data
 - ~13% admit improper
 - Another 10% "suspected"

Psychology?

- Scientific study of behavior
- People act for reasons
- Successful behavior change strategies require an understanding of the individual and situational factors that motivate and/or constrain behavior
- Many examples of failed (or not tested) and even boomerang effects

Common Practice

- Information campaigns (education campaigns)
 - Media messages intended to inform people about a behavior, program, or problem.
- Awareness campaigns
 - Media messages intended to convey to people the severity of a specific problem or issue.

The Information Campaign



The Information Campaign

- 1. Knowledge will correlate with behavior.--YES!
- 2. Educational efforts will lead to an increase in knowledge. -- YES!
- 3. Increasing knowledge will cause a change in behavior. -- NO!

Knowledge-Deficit Model

- Knowledge-deficit model ignores the motives for behavior.
- ◆ People engage in behaviors for reasons, and knowing more is not a reason for action. (Oskamp et al., 1998; Vining & Ebreo, 1990; Werner & Makela, 1999)
 - Perceived benefits (positive)
 - Personal inconvenience (negative)
 - External pressure (positive)
 - Financial motives (positive)

Knowledge-Deficit Model (caveat)

- Knowledge is not a motive for behavior.
- Lack of knowledge can be a barrier.
- Educational interventions can be effective in three situations:
 - 1. A substantial change has been made to an existing program.
 - 2. A program is being introduced for the first time to a target population
 - 3. No marketing materials have been provided in a long time, and there is evidence that people don't know what to do.

Knowledge-Deficit Model

- Why is it so widely used?
 - 1. No data is collected to evaluate the intervention, so agencies don't realize that it doesn't work
 - 2. Public image-- "we're doing something"
 - 3. It's relatively inexpensive and can be done by staff (or cheaply by a marketing firm)
 - 4. It would work for us (because we *already* care)

Community Based Social Marketing

- 1. Select the behavior (be specific, find baseline)
- 2. Identify barriers (structural or psychological) to the behavior--don't assume that you already know!
- 3. Design and pilot test an intervention to address the barriers (tools of behavior change)
- 4. Evaluate the intervention using a control group

- Population of 10 million.
 - 1.9 million DIYers generating nearly 16 million gallons of used oil
 - Procedural information distributed regularly through radio, television, print, and billboards
- More than 600 certified collection centers
- Weekly special collection events
- Barrier survey and focus groups (existing data)
 - Inconvenience and lack of time
 - 69% of respondents lacked proper storage container

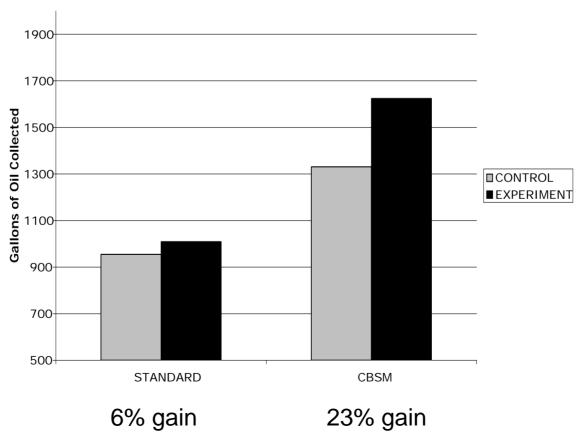
- Data from 16 certified collection centers in Los Angeles
- Free oil container give-away (15 quart storage container). Retail value: \$12
- Two matched pairs:
 - Container (informational sticker) control
 - Container (motivational sticker) control
- Results from quarter during intervention







Results from first quarter following intervention.



Oil Recycling in Madera County

- Rural, difficult behavior because of distance, high rates of improper disposal
- Population = 126,000
- 8 active certified collection centers
- Estimate 265,000 gallons generated by DIYers, but in 2002 only 39,000 (~15%) collected
- No existing data

Barrier survey

- Random sample of 502 residents (telephone)
- Reported oil recycling, attitudes, knowledge, intentions, beliefs
- Same items used in Madera and Napa (later)
- Primary barriers: difficulty using CCC (distance, hours, effort), social norms (other people don't), motivation to do it.

Table 1: Demographic characteristics of DIYers in Napa County, Madera County, and Comparison to 2000 Census Data

	Total Survey	Napa County	Madera County	Census 2000
	(N=220)	(N=95)	(N=125)	(California)
DIYer (%)	22%	18.7%	24.9%	19%
Gender (% male)	86%	83%	88%	50%
Ethnicity				
White (%)	65%	77%	68%	48%
Hispanic	16%	10%	24%	32%
Asian	3%	7%	1%	11%
African	2%	1%	2%	7%
American				
Income (median)	\$42,500	\$62,500	\$42,500	\$47,493
Age (median)	44	45	42	33
Homeowner (%)	58%	60%	57%	57%

Social Marketing--Madera

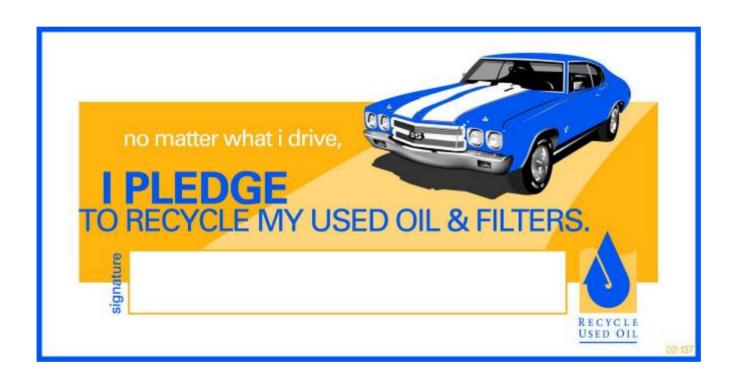
Two-fold intervention

- Increase CCC network to reduce distance
- Develop intervention to increase motivation

1. Increase network

- GIS software to map county and identify underserved
- 46 potential new collection sites
- Contacted each, offered to initiate and run the program for 1 year
- 12 interested
- None agreed
- Liability, costs, government infringement

2. Motivational pilot (commitment)



Participants: 90 DIYers at Napa Autoparts

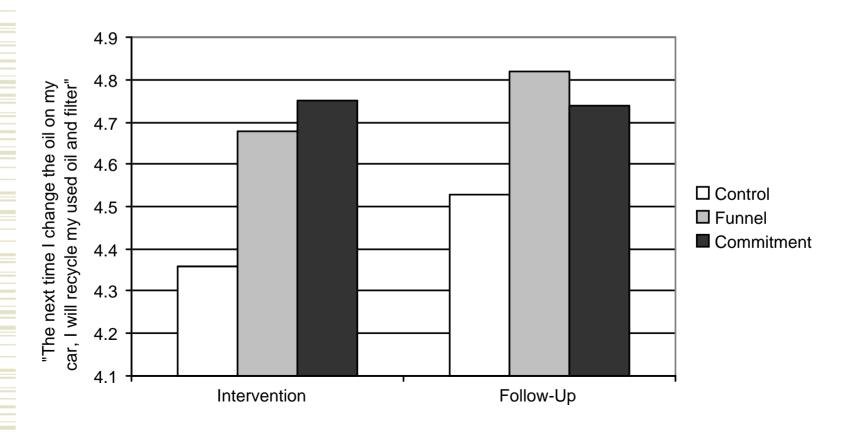
Experimental conditions: Free funnel, commitment, control

Procedure: Complete short survey

- sign commitment card (affixed to a free funnel)
- answer questions about their disposal intentions
- All conditions received information about disposal locations

Follow-up: Mail survey one month later

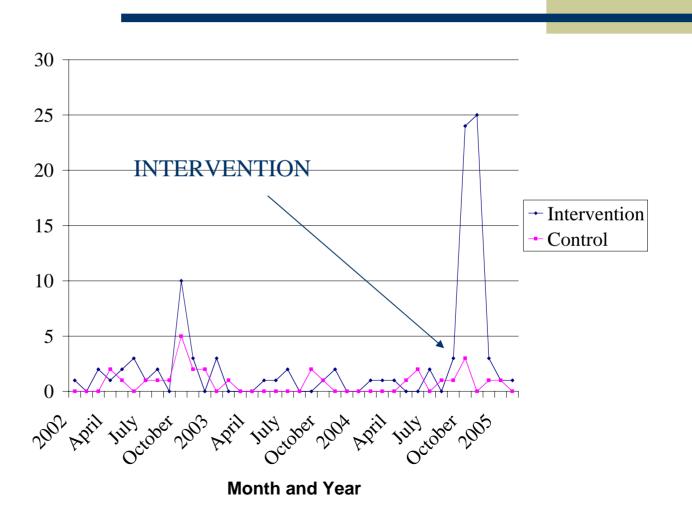
Q: The next time I change the oil on my car, I will recycle my used oil and filter. 1 (strongly disagree) to 5 (strongly agree)



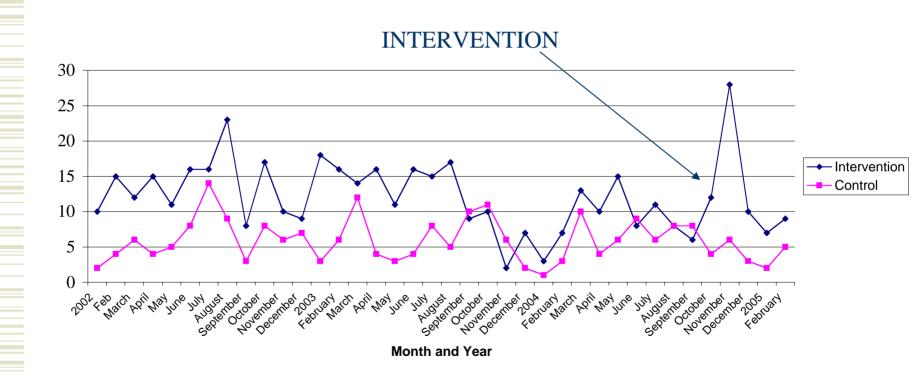
Social Marketing--Napa County

- Oil recycling in Napa County
 - Target population: 5,400 households service by curbside collection
- Curbside oil collection for residents in four areas of the county served by hauler
- Underutilized
 - 1026 potential users (based on 19% DIY rate)
 - Only 339 enrolled in the program (steady decline over past 5 years)
 - Potential oil collection of 8,593 gallons per year, but only 600 (7%) was collected last year through the program.
- Barrier survey showed:
 - 1. Lack of knowledge
 - 2. Belief that others in the community don't use it
- Designed direct mail brochure

Social Marketing--Napa County



Social Marketing--Napa County



CONCLUSIONS

CBSM can be an effective approach to changing behavior.

- Los Angeles: 22% increase in volume of oil collected in quarter following CBSM intervention
- Madera: Increased intentions, and proper disposal, using commitment.
- Napa: 248% increase in number of calls for oil pick-up in the month following our intervention.